

Lower Colorado River Multi-Species Conservation Program



Balancing Resource Use and Conservation

Colorado River Terrestrial and Riparian (CRITER) Group Meeting Minutes - January 2008

1. Welcome and Introductions – John Swett, Bureau of Reclamation (BOR), gave the welcome and introductions to the Colorado River Terrestrial and Riparian Group meeting of 2008.
2. MSCP overview- John Swett gave a power point presentation discussing an overview of MSCP program.
3. Agency and NGO – Carol Beardmore, U.S. Fish and Wildlife Service (FWS), presented the Conservation Goals and Objective for the Lower Colorado River, Watershed. This is a three state multi-partner team approach to strategic habitat conservation over a broad landscape and efforts are not dictated by environmental laws. They include research and monitoring needs and are dynamic and iterative. This strategic habitat conservation is a structured way to critically think about conservation actions, sets specific and explicit objectives for populations, and through modeling, systematically figure out how to achieve the objectives most efficiently.
4. Winter Banding – Chris Dodge, BOR, presented a PowerPoint presentation on LCR MSCP's winter banding efforts. Banding is conducted at two sites – Havasu NWR and Cibola NWR Nature Trail restoration sites.
5. Southwestern Willow Flycatcher (SWFL) – Mary Anne McLeod, SWCA Environmental, gave a PowerPoint presentation on the Southwestern Willow Flycatcher demography and life history studies from 2002-2007. Presence/absence surveys, distribution and numbers, cowbird trapping, microclimate/vegetation, and demographics were discussed.
 - Questions – will there be an effect of creating habitat in the middle of large areas of agriculture on increase parasitism rates? Would this create a problem later with increased parasitism? This may need to be studied as we progress with our habitat creation within the agricultural areas. What about vegetation and microclimate vs. nest success? This is being looked at by a graduate student.
6. Southwestern Willow Flycatchers along the Bill Williams – Mike Ingraldi, Arizona Game and Fish Department (AZGFD), discussed a SWFL validation study along the Bill Williams. This study will answer the question of how do the pulse releases manipulate and change the Bill Williams River.
7. Yellow-billed cuckoo (YBCU) – Matt Johnson, US Geological Service (USGS), presented a PowerPoint presentation on YBCU surveys along the lower Colorado River. The objectives of the study include conducting comprehensive, repeatable surveys in potentially suitable habitat, evaluating the

effectiveness of the protocol, identifying cuckoo habitat requirements, and identifying core YBCU breeding habitat.

8. YBCU – Murrelet Halterman, Southern Sierra Research Station, discussed her dissertation on Sexual dimorphism and morphology of the YBCU. She gave a PowerPoint presentation on determining if current DNA based genetic sexing techniques work for the YBCU (past attempts have been unsuccessful), determining if tail spot characteristics can be used to sex cuckoos, determining if YBCU exhibit sexual dimorphism in vocalizations, and determining if morphology measurements and discriminate Function Analysis can be used to develop a function to sex YBCU.
9. System-wide bird Surveys – John Bart, USGS, gave a PowerPoint presentation on the protocol for system-wide bird surveys, and discussed first year results.
10. Truckee River bird surveys – Elizabeth Ammon, Great Basin Bird Observatory (GBBO), presented a power point presentation and discussed system-wide and restoration monitoring of riparian birds, lessons from the Truckee River.
11. System wide Bat monitoring – Beatriz Vizcarra, AZGFD, gave a PowerPoint presentation discussing some of Pat Brown and Bob Berry's work. The presentation included bat distribution along the LCR and relative abundance, and survey methods used along the river including roost surveys, acoustics, and mist netting/harp trap.
12. Post Restoration Bat Monitoring – Susan Broderick, BOR, gave a PowerPoint presentation describing survey sites, methods, placement of Anabats, and results of the first year's monitoring.
13. Capture effort of Bats – Allen Calvert, BOR, gave a PowerPoint Presentation on preliminary results and future activities for a capture effort of bats at habitat creation sites along the LCR. He discussed the background, netting locations, methods, and results.
14. Small Mammal Genetics and Survey Techniques – Sean Neiswenter, University of Nevada Las Vegas (UNLV), and Chris Dodge, BOR, gave a PowerPoint presentation discussing genetics study for the two LCR MSCP covered cotton rat species. They discussed areas trapped, presented ranges of the genetic separation, and discussed the goals to use population parameters to qualitatively describe how different a locality is from the other localities.
15. Status and Conservation of the Relict Leopard frog – Dana Drake, UNLV, gave a PowerPoint presentation on the history of populations of the relict leopard frog. She discussed the Conservation Agreement and Range-wide Conservation Assessment and Strategy for the RLF. She also discussed the head-starting and translocation program, the current status including extant natural sites and experimental sites, and the Vegetation monitoring.
16. Current knowledge on the Phylogeography of Relict and Lowland Leopard Frogs – Viktoria Hemmings, UNLV, gave a PowerPoint presentation on the phylogeography of the Relict and Lowland Leopard Frogs.
17. Abiotic factors of insects – Bill Wiesenborn, BOR, gave a PowerPoint presentation on the importance of water and nitrogen that insects obtain from plant tissue. He discussed the study he is completing including the study area, methodology, and results.
18. Habitat monitoring – John Swett discussed Reclamation's habitat monitoring. The purpose of this monitoring is to measure changes in land cover types over time, monitor habitat requirements for

targeted covered species, provide data for adaptive management program, and determine credit for conservation measure accomplishment.

19. Conservation Area Selection, Development, and documentation – Terry Murphy, BOR, presented the LCR MSCP program guidelines, and Conservation Area Site Selection Criteria.
20. Beal Riparian and CRIT – Barb Raulston and Beth Sabin, BOR gave a PowerPoint presentation on Beal Riparian Demonstration area and the Colorado River Indian Tribal Preserve habitat creation area. Discussions included habitat being created, microclimate, and results of the LCR MSCP post restoration monitoring for these sites.
21. Seed Feasibility Study – Barb Raulston presented results of an ongoing seed feasibility study. The objective of this study is to determine if we can use cottonwood and willow seed to establish habitat. In the past, cuttings have been used which limit genetic diversity. Four nurseries have been planted, but most of the plantings have come from Bill Williams Stock. Currently tests have been conducted in a laboratory setting and results were used to set up a field trial. Next steps are to testing other species with seeding, such as baccharis, mesquite, etc.
22. The Importance Of Genetic Diversity In Riparian Restoration – Sharon Ferrier, Northern Arizona University, gave a power point presentation on the importance of maintaining genetic diversity in riparian restoration sites. She discussed the importance of phenotypes versus genotypes and maintaining diversity in both.
23. Palo Verde Ecological Reserve – Gail Iglitz, BOR, presented a PowerPoint presentation on the creation of the Palo Verde Ecological Reserve. She discussed the planting regime, phased planting, nursery, Phase 2, and mass transplanting technique.
24. Cibola Valley Conservation Area – Bill Singleton and Theresa Olson, BOR gave a PowerPoint presentation on the development of the Cibola Valley Conservation Area. Phase 1 and Phase 3 planting was discussed, time lapse pictures were shown, and monitoring results were presented.
25. Imperial Ponds Conservation Area – Nathan Lenon and Chris Dodge, BOR gave a PowerPoint presentation on the development of the Imperial Ponds Conservation Area. They discussed existing site conditions in 2004, conceptual design, site preparation, rip rap, boat ramps for each pond, completion of ponds, monitoring efforts, marsh bird surveys, aerial photos, small mammal trapping, and avian surveys.
26. Hart Mine Marsh – Greg Garnett, BOR, gave a PowerPoint Presentation on the restoration and creation of approximately 100 acres of marsh Habitat. Creation requirements of the LCR MSCP will be achieved while still meeting the goals identified in the FWS's management plan for the refuges. A Multi-disciplinary team approach looked at historical process, existing physical conditions, and plans for the site.

Flip chart notes from CRITER 2008

Southwestern Willow Flycatcher

- How “dense” is too dense and how does this relate to planting? Are we planting too close? What is the right spacing
- Need more quantitative hydrologic studies
- Look into Habitat suitability

Yellow-billed Cuckoo

- vocalization recording – run through sonogram?

- Presence/absence surveys work, why continue to study this?
- Looking at other vocalizations to see if they are more effective to illicit more responses
- Need double observer to refine detection probabilities
- Separate presence/absence from breeding protocols and have 2 different ones or an extension of P/A to determine breeding.
- Still haven't fully determined how many surveys are needed, how often to do playback, at what confidence levels, and what time of day?
- How do you get abundance estimates? Need better numbers and statistics to get good estimates.
- Determination of Prey base needed and how does this affect presence/absence by year? E.g. are they following the prey or is their presence more habitat related?

Marsh bird

- Find out Web location of the National Marshbird database. The web location is <http://www.pwrc.usgs.gov/poimt/mb>.

Bats

- Control areas, should they be based on system monitoring, on ag, or existing landbase?
- Lactating and nursing female and young are searching for specific resources and may go long distances to find those resources. This may affect system monitoring. Something to be aware of.
- Palm Tree management? Lots of questions as to when to leave in and when to take out?

Amphibians

- Look for populations of lowland leopard frogs in Bill Williams
- Rorbaugh and Clarkson may have more info on locations.

Restoration

- Study currently being conducted by NAU on parent tree inoculums for cottonwood
- Study being conducted at the Salton Sea in regards to selenium bioavailability. Something that may need to be studied in restoration and backwater sites along the LCR
- Kevin Reynolds FWS is looking at Selenium
- Wet features in sites? Need more research on moist soil versus standing water to determine what exactly is needed before incorporating into restoration sites.

PowerPoint presentations will be posted on www.lcrmscp.gov.

If you have questions regarding these meeting minutes, please contact Theresa Olson, BOR at tolson@lc.usbr.gov or at (702) 293-8127.